IN THE CLAIMS

Please amend the claims as follows:

1. (Canceled)

2. (Currently Amended) The method of claim [[1]] 9, further comprising:
converting the composite signal into a plurality of digital signals.

3. (Original) The method of claim 2, further comprising:
receiving the plurality of digital signals at an interference canceller.

4. – 5. (Canceled)

6. (Currently Amended) The method of claim [[1]] 9, wherein at least one of the plurality of digital bandpass filters provides a series of digital channel samples, further comprising:
providing the series of digital channel samples to a down converter.

7. (Currently Amended) The method of claim [[1]] 9, wherein the plurality of received signals comprises a plurality of baseband analog signals.

8. (Canceled)

9. (Currently Amended) A method, comprising:
shifting a center frequency of selected ones of a plurality of received signals by selected amounts to provide a plurality of shifted signals located in a frequency domain;
combining the plurality of shifted signals into a composite signal centered at a selected frequency, the selected frequency being approximately zero cycles-per-second;
sampling the composite signal with a single analog-to-digital converter to provide a multiplicity of digital samples;

providing the multiplicity of digital samples to a plurality of digital bandpass filters; and

canceling interference present in the composite signal, ~~The method of claim 8,~~ wherein canceling the interference present in the composite signal further comprises ~~comprises:~~ reconstructing the interference present in the composite signal.

10. (Currently Amended) The method of claim [[1]] 9, wherein the plurality of shifted signals are located substantially sequentially in the frequency domain.

11. (Canceled)

12. (Canceled)

13. (Currently Amended) An article comprising a machine-accessible medium having associated data, wherein the data, when accessed, results in a machine performing:

shifting a center frequency of selected ones of a plurality of received signals by a selected amount to provide a plurality of shifted signals located in a frequency domain;

combining the plurality of shifted signals into a composite signal centered at a selected frequency, the selected frequency being approximately zero cycles-per-second;

sampling the composite signal with a single analog-to-digital converter to provide a multiplicity of digital samples; and

providing the multiplicity of digital samples to a plurality of digital bandpass filters, ~~The article of claim 12,~~ wherein the composite signal includes a plurality of protocols associated with the plurality of received signals.

14. (Currently Amended) The article of claim [[12]] 13, wherein the composite signal includes a plurality of signals from a plurality of antennas.

15. (Currently Amended) The article of claim [[12]] 13, wherein the data, when accessed, results in the machine performing:

selecting a single sampling frequency rate for the composite signal; and

determining a down conversion frequency for selected radio frequency signals associated with the plurality of received signals.

16. (Currently Amended) The article of claim [[12]] 13, wherein the plurality of shifted signals are located substantially sequentially in the frequency domain.

17. (Canceled)

18. (Currently Amended) An apparatus, comprising:

a single analog-to-digital converter to sample a composite signal and to provide a multiplicity of digital samples, the composite signal being centered at a selected frequency of approximately zero cycles-per-second;

a plurality of digital bandpass filters to couple to the analog-to-digital converter and to receive the multiplicity of digital samples; and

an analog stage to couple to the analog-to-digital converter, wherein the analog stage is to shift a center frequency of a plurality of received signals by a selected amount to provide a plurality of shifted signals for combination into the composite signal, and wherein the composite signal includes a plurality of protocols associated with the plurality of received signals.

19. (Original) The apparatus of claim 18, wherein the analog stage further comprises:

a plurality of sections corresponding to the plurality of received signals, wherein selected ones of the sections include at least one bandpass filter and a mixer.

20. (Original) The apparatus of claim 18, wherein the analog stage further comprises:

a combiner selected from a power combiner, a mixer, and an adder.

21. (Original) The apparatus of claim 18, further comprising:

an interference canceller to couple to the analog-to-digital converter.

22. (Previously Presented) The apparatus of claim 18, further comprising:

a plurality of digital processing modules corresponding to the plurality of received signals, wherein selected ones of the digital processing modules include at least one of the digital bandpass filters and a down converter.

23. (Original) The apparatus of claim 18, further comprising:

an active channel controller to adjust a sampling rate associated with the analog-to-digital converter.

24. (Canceled)

25. (Currently Amended) The system of claim [[24]] 28, further comprising:

an interference canceller to couple to the analog-to-digital converter.

26. (Canceled)

27. (Currently Amended) The system of claim [[26]] 28, wherein the active channel controller is to select a channel included in the composite signal corresponding to a selected protocol.

28. (Currently Amended) A system, comprising:

a single analog-to-digital converter to sample a composite signal and to provide a multiplicity of digital samples, the composite signal being centered at a selected frequency of approximately zero cycles-per-second;

a plurality of digital bandpass filters to couple to the analog-to-digital converter and to receive the multiplicity of digital samples;

an analog stage to couple to the analog-to-digital converter, wherein the analog stage is to shift a center frequency of a plurality of received signals by a selected amount to provide a plurality of shifted signals for combination into the composite signal;

an omnidirectional antenna to couple to the analog stage; and

an active channel controller to couple to the analog-to-digital converter, ~~The system of claim 26,~~ wherein the active channel controller is to determine a down conversion frequency according to an activity status of a selected section included in a plurality of sections corresponding to the plurality of received signals.